

Claim 1 (currently amended): A method of managing operation of a locomotive that moves between at least two operating areas, said locomotive traveling along a path comprised of the at least two operating areas, each operating area having at least one location profile associated therewith, with the location profile of one ~~operating area~~ one of the operating areas being different from that of a second ~~operating area~~ one of the operating areas, said method comprising:

- monitoring a location of the locomotive to determine its operating area; and
- determining a location profile associated with the determined operating area;
- controlling an operation of the locomotive as a function of the determined operating area and the associated location profile, said location profile being selected from ~~the~~ a group comprising a security profile and an ~~emissions~~ emission profile, wherein said security profile includes a restriction on an operation of the locomotive based on its position relative to a security control area, and wherein said ~~emissions~~ emission profile includes a restriction on an operation of the locomotive based on its position relative to an emission control area.

Claim 2 (currently amended): The method of claim 1 further including managing a plurality of locomotives operating in ~~an~~ the determined operating area to manage total emissions of all locomotives within the determined operating area.

Claim 3 (currently amended): The method of claim 1 wherein one of the location profiles is a security profile, said security profile includes a restriction on an operation of the locomotive while traveling on a portion of the path that is located ~~relative to~~ in a security control area.

Claim 4 (currently amended): The method of claim 3 further including managing a plurality of locomotives operating in ~~an~~ the determined operating area to manage restrictions on operation of all locomotives within the determined operating area, wherein ~~one of the~~ one of the determined operating areas is a security control area, said security control area having said security profile associated therewith.

Claim 5 (currently amended): The method of claim 1 wherein the security profile includes a valid security authorization parameter required by an operator of the locomotive, further comprising receiving a security authorization input from ~~a particular~~ the operator of the

locomotive and comparing the security authorization input received from the ~~particular~~ operator to the required security authorization parameter to determine if the received security authorization input is valid, and wherein the operator is allowed to operate the locomotive when the received security authorization parameter is valid.

Claim 6 (currently amended): The method of claim 5 wherein the security authorization input is received either from an ~~an particular~~ operator located on-board the locomotive or from an ~~an particular~~ operator located off-board the locomotive.

Claim 7 (currently amended): The method of claim 5 wherein receiving the security authorization input of the ~~particular~~ operator comprises receiving a security authorization input from a card key presented by the ~~particular~~ operator.

Claim 8 (currently amended): The method of claim 5 wherein controlling an operation of the locomotive comprises restricting or inhibiting an operation of one or more components of the locomotive when the received security authorization input of a ~~particular the~~ operator does not match the required security authorization parameter of the security profile.

Claim 9 (original): The method of claim 5 wherein the operator is an administrative system or device located on-board the locomotive or off-board the locomotive.

Claim 10 (currently amended): The method of claim 1 wherein a first operating area has a first location profile of operation and a second operating area has a second location profile, further comprising changing the location profile of the locomotive from the first location profile to the second location profile when the locomotive moves to the second operating area from the first operating area.

Claim 11 (canceled).

Claim 12 (previously presented): The method of claim 1 wherein a second locomotive is operably coupled in a consist configuration with the locomotive, further comprising controlling

an operation of the second locomotive as a function of the determined operating area and the associated location profile of the first locomotive.

Claim 13 (previously presented): The method of claim 1 further comprising monitoring an operating characteristic of the locomotive, said operating characteristic being representative of one or more operations of the locomotive, and wherein said controlling an operation includes controlling the operation of the locomotive as a function of the monitored operating characteristic.

Claim 14 (original): The method of claim 13 wherein an operating characteristic of the locomotive is selected from the list of: throttle setting, engine speed, fuel mixture, mechanical braking, air braking, automatic braking, engine cooling, energy storage, engine firing, hybrid energy use, dynamic braking, emission output, and tractive effort.

Claim 15 (original): The method of claim 1 wherein controlling an operation of the locomotive includes controlling one or more operations of the locomotive from the list: throttle, reverser, tractive effort, air braking, electronic mechanical braking, dynamic braking, engine speed, engine operation, engine load, and motoring profile.

Claim 16 (original): The method of claim 1 wherein the emission profile defines one or more emission levels or characteristics of the locomotive.

Claim 17 (original): The method of claim 1 wherein the emission profile defines one or more emission levels or characteristics for a plurality of locomotives.

Claim 18 (previously presented): The method of claim 17 wherein one of the at least two operating areas is an emission control area, and wherein managing the operation of a plurality of locomotives includes operating each of the plurality of locomotives as a function of a location of the plurality of locomotives and an emission characteristic of one or more of the plurality of locomotives, the method comprising:

determining a location for each of the plurality of locomotives;

determining the emission characteristic for each of the one or more plurality of locomotives having a determined location within the same emission control area;

monitoring an emission parameter of each of the one or more plurality of locomotives determined to be within the same emission control area;

determining a control parameter as a function of the determined location of the one or more plurality of locomotives and as a function of the monitored emission parameters and the determined emission characteristics; and

controlling an operation of the each of the one or more plurality locomotives responsive to the control parameter.

Claim 19 (original): The method of claim 18 wherein controlling includes calculating, tracking, managing and trading emissions credits for each of the one or more plurality of locomotives within the emission control area.

Claims 20-45 (cancelled).